American College of Radiology ACR Appropriateness Criteria®

Dizziness and Ataxia

Variant 1: Adult. Brief episodic vertigo. Triggered by specific head movements (eg, Dix-Hallpike maneuver). Initial imaging.

	Appropriateness	G07		D 1 DD1		3.5 31			F	inal '	Tabu	latio	ns		
Procedure	Category	SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
CT temporal bone with IV contrast	Usually not appropriate	Expert Consensus	��� 1-10 mSv		1	1	18	0	2	0	0	0	0	0	0
CT temporal bone without IV contrast	Usually not appropriate	Expert Consensus	��� 1-10 mSv		1	1	17	0	2	1	0	0	0	0	0
CT temporal bone without and with IV contrast	Usually not appropriate	Expert Consensus	��� 1-10 mSv		1	1	18	0	2	0	0	0	0	0	0
CT head with IV contrast	Usually not appropriate	Expert Consensus	��� 1-10 mSv	��� 0.3- 3 mSv [ped]	1	1	17	0	2	1	0	0	0	0	0
CT head without IV contrast	Usually not appropriate	Limited	��� 1-10 mSv	��� 0.3- 3 mSv [ped]	1	1	13	2	2	2	0	0	0	0	0
		References		Study	Quality										
		6 (32462345)			4										
CT head without and with IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv	���� 3- 10 mSv [ped]	1	1	17	2	1	0	0	0	0	0	0
CTA head and neck with IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv	���� 3- 10 mSv [ped]	1	1	16	1	0	1	2	0	0	0	0
MRA head and neck without IV contrast	Usually not appropriate	Limited	O 0 mSv	O 0 mSv [ped]	1	1	13	2	2	1	1	0	0	0	0

			References		Study	/ Quality										
			23 (23903461)			2										
MRA head and neck without and with IV contrast	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	14	0	2	2	1	0	1	0	0
MRI head and internal auditory canal without IV contrast	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	16	1	1	1	0	0	0	0	0
MRI head and internal auditory canal without and with IV contrast	Usuall approp		Limited	O 0 mSv	O 0 mSv [ped]	1	1	13	2	1	0	1	2	0	0	0
			References		Study	Quality		_		•	•			•	•	
			21 (28943053)		,	2										
MRI head without IV contrast	Usuall approp		Limited	O 0 mSv	O 0 mSv [ped]	1	1	12	2	2	3	0	0	0	0	0
			References		Study	Quality		•			•		•		•	
			24 (28390809)			1										
MRI head without and with IV contrast	Usuall approp	•	Limited	O 0 mSv	O 0 mSv [ped]	1	1	12	2	1	2	2	0	0	0	0
			References		Study	Quality		•							•	
			6 (32462345)			4										
			20 (29056234)			4										
MRI cervical and thoracic spine without and with IV contrast	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	0	2	0	0	0	0	0	0
MRI cervical and thoracic spine without IV contrast	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	0	2	0	0	0	0	0	0
MRI cervical and thoracic spine with IV contrast	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	0	2	0	0	0	0	0	0
MRI head with IV contrast	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	1	1	1	1	0	1	0	0
MRA head and neck with IV contrast	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	14	0	3	1	1	0	1	0	0

MRI head and internal auditory canal with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	14	0	0	2	2	0	2	0	0
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Variant 2: Adult. Acute persistent vertigo. Normal neurologic examination and HINTS examination examination consistent with peripheral vertigo. Initial imaging.

	Appropri	iateness	207							F	inal '	Tabu	lation	ıs		
Procedure	Categ		SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
MRI head without IV contrast	May approp		Strong	O 0 mSv	O 0 mSv [ped]	5	5	3	2	0	4	9	0	0	0	1
	•		References		Study	Quality									•	
			29 (24920847)			2										
			39 (28687453)			2										
			38 (25307984)			2										
			37 (23722117)			4		_								
CT temporal bone with IV contrast	Usuall approp		Expert Consensus	��� 1-10 mSv		1	1	17	1	1	0	1	0	0	0	0
CT temporal bone without IV contrast	Usuall approp		Expert Consensus	��� 1-10 mSv		1	1	15	1	1	3	0	0	0	0	0
CT temporal bone without and with IV contrast	Usuall approp		Expert Consensus	��� 1-10 mSv		1	1	18	1	1	0	0	0	0	0	0
CT head with IV contrast	Usuall approp		Expert Consensus	��� 1-10 mSv	��� 0.3- 3 mSv [ped]	1	1	18	1	0	0	0	0	1	0	0
CT head without IV contrast	Usuall approp		Limited	��� 1-10 mSv	��� 0.3- 3 mSv [ped]	1	1	11	2	1	2	3	0	0	0	0
			References		Study	Quality										
			28 (27495834)			3										
CT head without and with IV contrast	Usuall approp		Expert Consensus	��� 1-10 mSv	���� 3- 10 mSv [ped]	1	1	18	1	1	0	0	0	0	0	0

CTA head and neck with IV contrast	Usually not appropriate	Expert Consensus	��� 1-10 mSv	���� 3- 10 mSv [ped]	1	1	14	0	2	3	1	0	0	0	0
MRA head and neck without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	0	2	2	0	0	1	0	0
MRA head and neck without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	0	2	2	0	0	1	0	0
MRI head and internal auditory canal without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	14	1	1	2	1	0	1	0	0
MRI head and internal auditory canal without and with IV contrast	Usually not appropriate	Strong	O 0 mSv	O 0 mSv [ped]	1	1	10	2	2	1	3	1	0	0	0
		References		Study	Quality										
		1 (29395695)			4										
		34 (22844866)			2										
		36 (31531775)			2										
		35 (32079028)			2			1			1				
MRI head without and with IV contrast	Usually not appropriate	Limited	O 0 mSv	O 0 mSv [ped]	1	1	10	2	3	1	3	0	0	0	0
		References		Study	Quality										
		25 (30882702)			2										
MRI cervical and thoracic spine without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	1	1	0	0	0	0	0	0
MRI cervical and thoracic spine without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	19	0	1	0	0	0	0	0	0
MRI cervical and thoracic spine with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	1	1	0	0	0	0	0	0
MRI head with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	16	1	1	0	1	0	1	0	0
MRA head and neck with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	0	2	2	0	0	1	0	0

MRI head and internal auditory canal with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	1	2	0	1	0	1	0	0	
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Variant 3: Adult. Acute persistent vertigo. Abnormal neurologic examination or HINTS examination is consistent with central vertigo. Initial imaging.

	Appropriateness								F	inal	Tabu	latio	ns		
Procedure	Category	SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5			8	9
MRI head without IV contrast	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	9	9	0	0	1	1	0	0	3	5	10
		References		Study	Quality										
		46 (25956665)			3										
		29 (24920847)			2										
		30 (24127701)			2										
		2 (22940762)			4										
		1 (29395695)			4										
		6 (32462345)			4										
		47 (21986058)			2										
		45 (20861624)			2										
		44 (21330074)			4										
		37 (23722117)			4		_								
CT head without IV contrast	May be appropriate	Limited	��� 1-10 mSv	��� 0.3- 3 mSv [ped]	6	6	0	0	1	1	4	4	2	3	5
		References		Study	Quality										
		2 (22940762)			4										
		6 (32462345)			4										
CTA head and neck with IV contrast	May be appropriate (Disagreement)	Expert Opinion	��� 1-10 mSv	���� 3- 10 mSv [ped]	5	5	3	0	0	1	5	5	4	1	0
MRA head and neck without IV contrast	May be appropriate (Disagreement)	Expert Opinion	O 0 mSv	O 0 mSv [ped]	5	5	3	0	0	2	9	4	1	0	0

MRA head and neck without and with IV contrast	May be appropriate (Disagreement)	Expert Opinion	O 0 mSv	O 0 mSv [ped]	5	5	3	0	0	1	6	4	5	0	0
MRI head without and with IV contrast	May be appropriate (Disagreement)	Expert Opinion	O 0 mSv	O 0 mSv [ped]	5	5	4	0	0	0	1	1	6	6	1
MRA head and neck with IV contrast	May be appropriate (Disagreement)	Expert Opinion	O 0 mSv	O 0 mSv [ped]	5	5	3	0	0	2	9	3	2	0	0
CT temporal bone with IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv		1	1	17	1	2	0	0	0	0	0	0
CT temporal bone without IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv		1	1	16	1	2	1	0	0	0	0	0
CT temporal bone without and with IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv		1	1	17	1	2	0	0	0	0	0	0
CT head with IV contrast	Usually not appropriate	Expert Consensus	୫୫୫ 1-10 mSv	��� 0.3- 3 mSv [ped]	1	1	15	2	1	1	0	0	1	0	0
CT head without and with IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv	���� 3- 10 mSv [ped]	1	1	11	5	2	0	1	0	0	0	0
MRI head and internal auditory canal without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	13	0	3	1	1	1	0	1	0
MRI head and internal auditory canal without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	0	3	1	1	0	0	0	0
MRI cervical and thoracic spine without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	0	2	0	0	0	0	0	0
MRI cervical and thoracic spine without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	0	2	0	0	0	0	0	0
MRI cervical and thoracic spine with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	0	2	0	0	0	0	0	0
MRI head with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	17	0	2	0	0	0	0	0	0

leanal with IV contract	Usually not Expert Consensus	O 0 mSv O 0 n	nSv d]	1	14	0	4	1	1	0	0	0	0
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Variant 4: Adult. Chronic recurrent vertigo. Associated with unilateral hearing loss or tinnitus. Initial imaging.

D .	Appropriateness	COL	A L M DDI	D 1 DD1	D (1)	3.6.11]	Final	Tabu	latio	ns		
Procedure	Category	SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
CT temporal bone without IV contrast	Usually appropriate	Strong	��� 1-10 mSv		7	7	1	0	0	0	4	4	3	6	2
		References		Study	Quality		•								
		49 (25913283)			2										
		48 (32537729)			2										
		50 (32867723)			2										
MRI head and internal auditory canal without and with IV contrast	Usually appropriate	Strong	O 0 mSv	O 0 mSv [ped]	7	7	0	0	0	0	2	5	5	1	7
		References		Study	Quality		•								
		67 (27187035)			4										
		56 (25742875)			2										
		54 (25457542)			2										
		65 (31356219)			4										
		52 (32241307)			4										
		58 (30550412)			2										
		61 (30556402)			2										
		63 (30600169)			2										
		53 (31743294)			2										
		66 (30337432)			2										
		60 (30719545)			2										
		55 (33646188)			4										
		62 (33528304)			2										
		57 (35759015)			2										

59 (25456512)	2
64 (33492418)	2
51 (34142211)	4

MRI head and internal auditory canal without IV contrast	May be appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	5	5	1	0	0	2	12	3	1	0	0
CT temporal bone with IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv		1	1	16	1	1	1	0	0	1	0	0
CT temporal bone without and with IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv		1	1	17	2	0	0	0	0	0	0	0
CT head with IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv	��� 0.3- 3 mSv [ped]	1	1	18	1	0	0	0	0	0	0	0
CT head without IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv	��� 0.3- 3 mSv [ped]	1	1	17	2	0	0	0	0	0	0	0
CT head without and with IV contrast	Usually not appropriate	Expert Consensus	ଫଫଫ 1-10 mSv	���� 3- 10 mSv [ped]	1	1	18	1	0	0	0	0	0	0	0
CTA head and neck with IV contrast	Usually not appropriate	Expert Consensus	ଫଫଫ 1-10 mSv	���� 3- 10 mSv [ped]	1	1	18	1	0	0	0	0	0	0	0
MRA head and neck without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	1	2	0	1	0	1	0	0
MRA head and neck without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	1	2	0	1	0	1	0	0
MRI head without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	16	2	1	0	0	0	0	0	0
MRI head without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	16	2	1	0	0	0	0	0	0
MRI cervical and thoracic spine without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	1	1	0	0	0	0	0	0

MRI cervical and thoracic spine without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	1	1	0	0	0	0	0	0
MRI cervical and thoracic spine with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	1	1	0	0	0	0	0	0
MRI head with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	17	2	0	0	0	0	0	0	0
MRA head and neck with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	1	2	0	1	0	1	0	0
MRI head and internal auditory canal with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	17	1	0	1	0	0	0	0	0

Variant 5: Adult. Chronic recurrent vertigo. Associated with other brainstem neurologic deficits. Initial imaging.

	Appropriate	eness		D 1 DD1	- ·				F	inal '	Tabu	latio	ns		
Procedure	Category	SOE SOE	Adults RRL	Peds RRL	Rating	Median	1	2	3	4	5	6	7	8	9
CTA head and neck with IV contrast	Usually appropriat		��� 1-10 mSv	���� 3- 10 mSv [ped]	8	8	1	0	0	0	3	1	2	6	7
		References		Study	Quality										
		14 (22931729)			4						_				
MRA head and neck without and with IV contrast	Usually appropriat		O 0 mSv	O 0 mSv [ped]	8	8	1	0	0	0	1	0	4	8	5
		References		Study	Quality										
		14 (22931729)			4										
		69 (27000236)			4										
		13 (31967281)			2										
MRI head without IV contrast	Usually appropriat		O 0 mSv	O 0 mSv [ped]	8	8	1	0	0	0	2	0	6	6	4
MRA head and neck without IV contrast	Usually appropriat		O 0 mSv	O 0 mSv [ped]	7	7	1	0	0	0	5	0	5	4	4

MRA head and neck with IV contrast	Usuall appropri		Limited	O 0 mSv	O 0 mSv [ped]	7	7	1	0	0	0	1	0	9	4	4
			References		Study	Quality										
			14 (22931729)			4										
			69 (27000236)			4										
			13 (31967281)			2										
CT head without IV contrast	May b appropri		Expert Consensus	��� 1-10 mSv	��� 0.3- 3 mSv [ped]	5	5	1	1	0	2	11	3	0	0	1
MRI head without and with IV contrast	May b appropri (Disagreer	iate	Expert Opinion	O 0 mSv	O 0 mSv [ped]	5	5	2	0	1	0	2	3	2	6	3
			References		Study	Quality										
			70 (22920240)			2										
			71 (22878005)			2										
			68 (22555580)			2		_								
CT temporal bone with IV contrast	Usually appropri		Expert Consensus	��� 1-10 mSv		1	1	18	0	2	0	0	0	0	0	0
CT temporal bone without IV contrast	Usually appropri		Expert Consensus	��� 1-10 mSv		1	1	17	0	1	1	0	0	1	0	0
CT temporal bone without and with IV contrast	Usually appropri		Expert Consensus	��� 1-10 mSv		1	1	18	0	2	0	0	0	0	0	0
CT head with IV contrast	Usually appropri		Expert Consensus	��� 1-10 mSv	��� 0.3- 3 mSv [ped]	1	1	16	1	2	1	0	0	0	0	0
CT head without and with IV contrast	Usually appropri		Expert Consensus	��� 1-10 mSv	���� 3- 10 mSv [ped]	1	1	17	1	2	0	0	0	0	0	0
MRI head and internal auditory canal without IV contrast	Usually appropri		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	16	0	0	0	2	2	0	0	0
MRI head and internal auditory canal without and with IV contrast	Usually appropri		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	16	1	1	0	0	0	0	1	0

MRI cervical and thoracic spine without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	19	0	1	0	0	0	0	0	0
MRI cervical and thoracic spine without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	0	1	0	0	1	0	0	0
MRI cervical and thoracic spine with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	19	0	1	0	0	0	0	0	0
MRI head with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	16	1	0	1	1	0	0	0	0
MRI head and internal auditory canal with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	16	1	1	1	0	0	0	0	0

Variant 6: Adult. Chronic disequilibrium with signs of cerebellar ataxia. Initial imaging.

	Appropri	iateness				3.6.11			F	inal '	Tabu	latio	ns				
Procedure	Categ		SOE	Adults RR	L Peds	KKL	Kating	Median	1	2	3	4	5	6	7	8	9
MRI head without and with IV contrast	Usua approp		Strong	O 0 mSv	O 0 i		8	8	0	0	0	0	2	0	5	6	7
			References			Study	Quality										
			82 (24375449) 83 (23118909)				3										
			·				2										
			84 (35732792)				2										
MRI head without IV contrast	Usua approp		Strong	O 0 mSv	O 0 i		7	7	0	0	0	0	2	5	5	3	5
			References		·	Study	Quality		_								
			82 (24375449)				3										
			83 (23118909)				2										
			84 (35732792)				2										
MRI cervical and thoracic spine without IV contrast	May approp		Strong	O 0 mSv	O 0 i		5	5	1	0	0	2	12	2	2	0	0
	·		References			Study	Quality										

79 (34210665)		2	
81 (27173364)		4	
78 (28386793)		2	
80 (30473193)		4	

CT temporal bone with IV contrast	Usuall approj		Expert Consensus	��� 1-10 mSv		1	1	18	0	1	0	1	0	0	0	0
CT temporal bone without IV contrast	Usuall approj	ly not priate	Expert Consensus	��� 1-10 mSv		1	1	18	0	1	0	0	0	1	0	0
CT temporal bone without and with IV contrast	Usuall approj		Expert Consensus	��� 1-10 mSv		1	1	18	0	1	0	1	0	0	0	0
CT head with IV contrast	Usuall approp		Expert Consensus	��� 1-10 mSv	��� 0.3- 3 mSv [ped]	1	1	19	0	1	0	0	0	0	0	0
CT head without IV contrast	Usuall approp		Limited	��� 1-10 mSv	��� 0.3- 3 mSv [ped]	1	1	10	1	3	0	4	0	1	0	0
						0 11										

 References
 Study Quality

 76 (21827916)
 4

CT head without and with IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv	���� 3- 10 mSv [ped]	1	1	19	0	1	0	0	0	0	0	0
CTA head and neck with IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv	���� 3- 10 mSv [ped]	1	1	16	0	1	1	1	0	1	0	0
MRA head and neck without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	1	0	0	3	0	0	1	0
MRA head and neck without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	17	1	0	0	0	0	1	0	0
MRI head and internal auditory canal without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	0	0	0	0	0	1	0	0
MRI head and internal auditory canal without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	17	1	0	0	0	0	1	0	0

MRI cervical and thoracic spine without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	13	2	2	0	1	1	0	1	0
MRI cervical and thoracic spine with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	2	1	0	1	0	1	0	0
MRI head with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	17	0	1	0	1	0	0	0	0
MRA head and neck with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	0	0	0	3	1	1	0	0
MRI head and internal auditory canal with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	16	1	0	0	1	1	1	0	0

Variant 7: Adult. Chronic disequilibrium with signs of sensory or proprioceptive ataxia. Initial imaging.

ъ.,	Appropri	iateness					N. 11			F	inal '	Гabu	latio	ns			
Procedure	Categ		SOE	Adults RRI	L Peds	KKL	Rating	Median	1	2	3	4	5	6	7	8	9
MRI cervical and thoracic spine without and with IV contrast	Usua approp	.*	Strong	O 0 mSv		mSv ed]	7	7	0	0	1	0	2	4	5	5	3
			References			Study	Quality										
			79 (34210665) 78 (28386793)				2										
			78 (28386793)				2										
			80 (30473193)				4										
MRI cervical and thoracic spine without IV contrast	Usua approp		Strong	O 0 mSv		mSv ed]	7	7	0	0	1	0	1	4	9	1	4
			References			Study	Quality										
			79 (34210665)				2										
			78 (28386793)				2										
			80 (30473193)				4		_								
CT temporal bone with IV contrast	Usually approp		Expert Consensus	��� 1-10 mSv			1	1	18	0	2	0	0	0	0	0	0

CT temporal bone without IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv		1	1	17	0	2	1	0	0	0	0	0
CT temporal bone without and with IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv		1	1	18	0	2	0	0	0	0	0	0
CT head with IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv	��� 0.3- 3 mSv [ped]	1	1	18	1	1	0	0	0	0	0	0
CT head without IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv	��� 0.3- 3 mSv [ped]	1	1	17	0	0	0	1	0	1	1	0
CT head without and with IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv	���� 3- 10 mSv [ped]	1	1	18	1	1	0	0	0	0	0	0
CTA head and neck with IV contrast	Usually not appropriate	Expert Consensus	≎≎≎ 1-10 mSv	���� 3- 10 mSv [ped]	1	1	16	0	0	2	0	0	1	1	0
MRA head and neck without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	1	0	0	2	0	1	1	0
MRA head and neck without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	16	0	1	0	2	1	0	0	0
MRI head and internal auditory canal without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	17	0	1	0	1	0	1	0	0
MRI head and internal auditory canal without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	17	0	1	0	0	0	1	1	0
MRI head without IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	13	1	2	0	3	0	1	0	0
MRI head without and with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	1	2	0	0	1	0	0	0
MRI cervical and thoracic spine with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	16	1	2	0	0	0	0	0	0
MRI head with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	13	1	2	0	2	0	1	1	0

MRA head and neck with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	15	0	1	1	2	1	0	0	0
MRI head and internal auditory canal with IV contrast	Usually not appropriate	Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	17	0	1	0	1	1	0	0	0

Variant 8: Adult. Nonspecific dizziness without vertigo, ataxia, or other neurologic deficits. Initial imaging.

B 1	Appropriateness Category		COF	A L L DDI	D I DDI	Rating	Median	Final Tabulations								
Procedure			SOE	Adults RRL	Peds RRL			1	2	3	4	5	6	7	8	9
MRI head without IV contrast	May be appropriate		Limited	O 0 mSv	O 0 mSv [ped]	5	5	1	0	0	1	10	4	3	0	0
		References		Study Quality												
			4 (32618835)		2											
						4										
CT temporal bone with IV contrast	Usually not appropriate		Expert Consensus	≎≎≎ 1-10 mSv		1	1	18	0	1	1	0	0	0	0	0
CT temporal bone without IV contrast	Usually not appropriate		Expert Consensus	��� 1-10 mSv		1	1	18	0	1	0	1	0	0	0	0
CT temporal bone without and with IV contrast	Usually not appropriate		Expert Consensus	��� 1-10 mSv		1	1	18	0	1	0	1	0	0	0	0
CT head with IV contrast	Usually not appropriate		Expert Consensus	��� 1-10 mSv	��� 0.3- 3 mSv [ped]	1	1	18	1	1	0	0	0	0	0	0
CT head without IV contrast	Usually not appropriate		Strong	��� 1-10 mSv	��� 0.3- 3 mSv [ped]	1	1	11	2	1	0	3	1	1	0	0

References	Study Quality
2 (22940762)	4
4 (32618835)	2
3 (33487089)	2

CT head without and with IV contrast	Usuall		Expert Consensus	��� 1-10 mSv	���� 3- 10 mSv	1	1	17	2	1	0	0	0	0	0	0
	approp	rrate	Consensus	IIIOV	[ped]											
CTA head and neck with IV contrast	Usually not appropriate		Limited	≎≎≎ 1-10 mSv	���� 3- 10 mSv [ped]	1	1	12	2	1	1	2	0	1	0	0
			References		Study Quality					•	•		•		•	
					2											
MRA head and neck without IV contrast	Usuall approp		3 (33487089) Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	12	1	4	1	2	0	0	0	0
MRA head and neck without and with IV contrast	Usually not appropriate		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	12	0	3	2	1	1	0	1	0
MRI head and internal auditory canal without IV contrast	Usually not appropriate		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	17	0	1	0	1	1	0	0	0
MRI head and internal auditory canal without and with IV contrast	Usually not appropriate		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	17	0	1	0	0	0	1	1	0
MRI head without and with IV contrast	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	14	0	1	2	1	0	0	1	1
MRI cervical and thoracic spine without and with IV contrast	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	0	0	0	1	0	1	0	0
MRI cervical and thoracic spine without IV contrast	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	0	0	0	1	1	0	0	0
MRI cervical and thoracic spine with IV contrast	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	18	0	0	0	1	1	0	0	0
MRI head with IV contrast	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	16	0	1	0	2	0	1	0	0
MRA head and neck with IV contrast	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	13	0	5	1	1	0	0	0	0
MRI head and internal auditory canal with IV contrast	Usuall approp		Expert Consensus	O 0 mSv	O 0 mSv [ped]	1	1	17	0	1	0	1	1	0	0	0

Appendix Key

A more complete discussion of the items presented below can be found by accessing the supporting documents at the designated hyperlinks.

Appropriateness Category: The panel's recommendation for a procedure based on the assessment of the risks and benefits of performing the procedure for the specified clinical scenario.

SOE: Strength of Evidence. The assessment of the amount and quality of evidence found in the peer reviewed medical literature for an appropriateness recommendation.

- **References:** The citation number and PMID for the reference(s) associated with the recommendation.
- Study Quality: The assessment of the quality of an individual reference based on the number of study quality elements described in the reference.

RRL: Relative Radiation Level. A population based assessment of the amount of radiation a typical patient may be exposed to during the specified procedure.

Rating: The final rating (1-9 scale) for the procedure as determined by the panel during rating rounds.

Median: The median rating (1-9 scale) for the procedure as determined by the panel during rating rounds.

Final tabulations: A histogram showing the number of panel members who rated the procedure as noted in the column heading (ie, 1, 2, 3, etc.).

Additional supporting documents about the AC methodology and processes can be found at www.acr.org/ac.